Dominant Strategies

Game Theory Course:
Jackson, Leyton-Brown & Shoham

Domination

- Let s_i and s_i' be two strategies for player i, and let S_{-i} be the set of all possible strategy profiles for the other players
  - What's a "strategy"?
  - For now, just choosing an action ("pure strategy")

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Definition

s_i **strictly dominates** s_i' if $\forall s_{-i} \in S_{-i}, u_i(s_i, s_{-i}) > u_i(s_i', s_{-i})$

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s_i **very weakly dominates** s_i' if $\forall s_{-i} \in S_{-i}, u_i(s_i, s_{-i}) \geq u_i(s_i', s_{-i})$

Equilibria and dominance

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	C	D
C	$-1, -1$	$-4, 0$
D	$0, -4$	$-3, -3$